



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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April 27, 1995

TO: Minerals File

FROM: Tom Munson, Reclamation Hydrologist 

RE: Site Inspection, Barrick Mercur, Mercur Canyon Mine, M/045/017, Tooele County, Utah

Date of Inspection: April 25, 1995
Time of Inspection: 10:00 am - 1:30 pm
Conditions: Cloudy and windy
Participants: Dennis Fredrick (Ground water section - DEQ); Brian Slade - Tooele County; Paul Beckett - Utah County; Shawn Davis, Dave Beatty, Dick Gilley, Gordon Gorney, Craig Olsen - Barrick Mercur; Tom Munson - DOGM

Purpose of Inspection: To examine Heap Leach #2 and general overall site visit

In coordination with the Division of Water Quality I visited the site and gained a general overview of the activities currently planned and predicted for the next year in terms of reclamation and closure of heap #2. The plans for the following year included raising the overall height of the impoundment and isolating the east bay of the impoundment by building a dike across the east bay of the tailings impoundment. The purpose of this project was to allow the operator to begin pumping water in to the east bay and hopefully drawn down the water in the rest of the impoundment. The arm dike will be built using Geogrid and gravel, a similar road building method used in crossing boggy areas.

The plans for Heap Leach #3 are not finalized although DEQ is looking the use of 'state of the art' neutralization and rinsing methodology for closure. The operator stated that not as much ore was being put on Heap #3 as was anticipated based on projected mining conditions.

The reclamation and building of a cutoff trench for the Reclaim cell south of the tailings impoundment was discussed and construction plans were discussed for the concrete cutoff trench.

Considerations For The Future

- 1.) Future reclamation plans have not clearly and completely defined **surface water** drainage, and where it will flow in relationship to final pit configurations. There was some discussions in regards to final reclamation but no definite plans have been finalized or submitted to the Division.



- 2.) The future reclamation of the tailings impoundment has not been proven or tested and the importance of furthering this effort was discussed. The reclamation of the small impoundment (reclaim cell) to the south of the tailings impoundment will occur in the near future and will hopefully provide some valuable data in regards to reclamation of the dewatered tails in the main impoundment.
- 3.) The use of a good vegetative cover is the cornerstone to the success of helping prevent infiltration of water into the tails and heap leach pads following reclamation. It would be helpful if some actual data was collected in regards to verifying this assumption from the reclaim cell test plot and heap leach #2.
- 4.) Future reclamation of pit areas must consider the use of grading plans to reduce the production of sediments (ponds, surface roughness, vegetation, etc.), promoting stability and preventing large contributions of sediments to surface water flows during major storm events following reclamation.